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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DIVECHA, KAMAL B

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/042,092

Applicant(s)

SCHEER ET AL.

Examiner

KAMAL B. DIVECHA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7-9,20,22,25 and 28-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7-9,20,22,25 and 28-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Claims 1, 2, 7-9, 20, 22, 25, 28-35 are pending in this application.

Claims 3-6, 10-19, 21, 23-24, 26, 27 and 36 are cancelled.

Applicant's arguments with respect to claims 1, 2, 7-9, 20, 22, 25, 28-35 have been considered but are moot in view of the new ground(s) of rejection, as necessitated by the substantial amendments to the claims.

DETAILED ACTION

Specification

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to adequately teach how to make and use the invention, i.e., failing to provide an enabling disclosure.

The test to be applied under the written description portion of 35 U.S.C. § 112, first paragraph, is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of later claimed subject matter. Vas-Cat, Inc. v. Mahurkar, 935 F. 2d 1555, 1565, 19 USPQ2d 111, 1118 (Fed. Cir. 1991), reh'rg denied (Fed. Cir. July 8, 1991) and reh'rg, en banc, denied (Fed. Cir. July 29, 1991).

The applicants have failed to provide an enabling disclosure in the detailed description of the embodiment. The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to support the subject matter set forth in these claims.

The claims recite "generating a plurality of network designs for the network based upon the design rule and the design list, wherein a first network design of the plurality of network design is selected and wherein the design rule determines a first server in the network is first in

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receiving all incoming data packets to the network” and “configuring software and hardware settings, for a second server in the network, the software and hardware settings including switches, jumpers, IP address, links, ports and values of software parameters, the configuration of the software and hardware settings based upon the design rule and the first network design...” (claim 1), and “...wherein the network handles variable workloads, and wherein all functions of the network continue to operate in the event the second server of the network fails” (claim 2).

However, the specification merely describes the system to configure, build and deploy a dynamic digital image for one or more components in a network after receiving a design (specification, summary, page 4 [009], page 5 [0010]). There is simply no teaching or suggestion of the fact or the process performing selection of a first network design from among a plurality of network design for a network...configuring software and hardware settings, including IP addresses, ports, and links based upon the design rule and wherein the network handles variable workloads, and wherein all functions of the network continue to operate in the event the second server of the network fails.

Applicant also stated in the remarks, that the amended claims do not include the limitation of performing selection of a network design from among a plurality of network design, in response to the prior 35 U.S.C. 101 rejection (See remarks, page 8), however the claims still recites the process wherein a first network design of the plurality of network design is selected.

Furthermore, applicant disclosure states:

[0027] The configuration logic block 222 may contain a configuration file that sets various logical or physical switches and jumpers for hardware and defines values of parameters for software. In an embodiment, the configuration logic 222 generates the unique network settings, such as IP addresses and ports, for each component to make sure the application layer of each server farm is pre-configured into each digital image prior to the digital image being deployed. In an embodiment, the configuration logic 222 stores the IP address unique to all of the components in each server farm associated with the master configurator 202 and the dedicated purpose of each server in the one or more server farms. In an embodiment, the configuration logic 222 includes a domain name server.

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There is simply no teaching of the process of configuring software and hardware...based upon the design rule and network design.

As such, the above claimed limitation presents a subject matter situation that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant is advised to take an appropriate action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 1, 2, 7-9, 20, 22, 25, 28-35 are rejected under 35 U.S.C. 112, first paragraph, for the reasons set forth in the objection to specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 2, 7, 9, 20, 25, 28, 29, 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abboud et al. (hereinafter Abboud, US 2002/0184484 A1) in view Steitle et al. (hereinafter Steitle, US 2002/0188700 A1).

As per claim 25, Abboud discloses an apparatus comprising: graphic user interface (fig. 6 item #600); configuring logic to configure network settings, including IP addresses, links and ports for a first server in the network (pg. 3 block #36); digital image building logic to build a digital image with the network settings for the first server in the network (pg. 2 block #15, pg. 5 block #50 and fig. 4B item #459); and deployment logic to deploy the digital image onto the first

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server in the network (pg. 2 block #16, pg. 3 block #32, 36 pg. 5 block #47, 51, pg. 6 block #61 and fig. 4A item #405).

However, Abboud does not disclose the process of receiving a design list for a network of servers, the design list comprising functions of the network, amount of hardware for the network, type of hardware for the network and number of WAN IP addresses assigned to the network; generating a plurality of networks designs for the network based upon the design rule and the design list wherein the design rule determines a first server in the network is receiving all incoming data packets to the network, and configuring software and hardware settings including switches, jumpers, for the server based upon the design rule and network design.

Steitle, from the same field of endeavor discloses the process of receiving a design list for a network of servers, the design list comprising functions of the network, amount of hardware for the network, type of hardware for the network and number of WAN IP addresses assigned to the network; generating a plurality of networks designs for the network based upon the design rule and the design list wherein the design rule determines a first server in the network is receiving all incoming data packets to the network, and configuring software and hardware settings including switches, jumpers, for the server based upon the design rule and network design (fig. 2, fig. 4: shows the designed network including servers, firewall, routers, etc., pg. 1 [0012-0015], pg. 2 [0019-0021], [0023-0026]).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Abboud in view of Steitle in order to design a network and configure the software and hardware based upon the design rule and the designed network.

One of ordinary skilled in the art would have been motivated because it would have allowed a user to design and implement a network comprising servers, routers, firewalls, etc. (Steitle, pg. 1 [0005], [0012]).

As per claim 2, Abboud discloses a system wherein the network comprises a server farm wherein the network handles variable workloads and wherein all functions of the network continue in the event the second server of the network fails (pg. 1 block#7 and fig. 2, Steitle, fig. 4).

As per claim 7, Abboud discloses the process of dynamically building the digital image (pg. 5 block #49-50 and pg. 6 block #58).

As per claim 9, Abboud discloses the process of rebuilding the digital image for at least one server in the network and redeploying the digital image for the at least one server (pg. 5 block #52, fig. 6 item #600 and pg. 6 block #58).

As per claim 29, Abboud discloses a system comprising a database to store one or more digital images of a server, one or more network topologies, and network configurations (pg. 5 block #55, pg. 6 block#61).

As per claim 31, Abboud does not disclose the process wherein the design rule instructing how a component in a network can or cannot be employed in the network.

Steitle, from the same field of endeavor discloses the process wherein the design rule instructs how a component in a network can or cannot be employed in the network (fig. 2, fig. 4: shows the designed network including servers, firewall, routers, etc., pg. 1 [0012-0015], pg. 2 [0019-0021], [0023-0026]).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Abboud in view of Steitle in order to provide a rule on how component in a network can or cannot be employed.

One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 25.

As per claims 1, 20, 28 and 33, they do not teach or further define over the limitations in claims 2, 7, 9, 25, 29 and 31. Therefore claims 1, 20, 28 and 33 are rejected for the same reasons as set forth in claims 2, 7, 9, 25, 29 and 31.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abboud et al. (hereinafter Abboud, US 2002/0184484 A1) in view Steitle et al. (hereinafter Steitle, US 2002/0188700 A1), and further in view of Haun et al. (hereinafter Haun, U. S. Patent No. 6,751,658 B1).

As per claim 8, Abboud in view of Steitle does not explicitly disclose the process of deploying the dynamically built image over a network connection in response to a net boot request from a first server.

Haun, from the same field of endeavor, discloses the process of transferring the boot image over a network connection in response to a net boot request from a network client (a network computer or server, fig. 3 step# 355, 375, 380, 385 and col. 9 L9 to col. 10 L16).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Haun as stated above with Abboud and

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Steitle in order to transfer or deploy the boot image in response to a net boot request from a server.

One of ordinary skilled in the art would have been motivated because net booting approach greatly simplifies network computers client administration and provides a high level of reliability for the network computers and/or servers (Haun, col. 9 L33-36).

4. Claims 22, 30, 32, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abboud et al. (hereinafter Abboud, US 2002/0184484 A1) in view in view Steitle et al. (hereinafter Steitle, US 2002/0188700 A1), and further in view of Li et al. (hereinafter Li, US 6,012,088).

As per claim 30, Abboud in view of Steitle does not disclose the process wherein the number of WAN IP addresses being fewer than the numbers of servers in the network and wherein configuring network settings comprising sending a request to a Domain Name system Server.

Li, discloses a system comprising a DNS server, DHCP server and a NAT server that translates host and network addresses (fig. 6 item #236, 238, 210, col. 2 L60-67, col. 8 L15-34: note that whenever a NAT server in configured in the network, It implies that the local network has fewer global or WAN IP addresses than the number of hosts in the network, and the NAT server solves the problem by translating the local IP address to the global IP address).

Therefore it would have obvious to a person of ordinary skilled in the art at the time the invention was made to modify Abboud and Steitle in view of Li in order to include NAT and DNS servers in the network.

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One of ordinary skilled in the art would have been motivate because it would have enabled communications between the local area network (LAN) and the Internet (Li, col. 2 L60-67, col. 8 L24-26).

As per claim 32, Abboud in view of Steitle does not disclose the system wherein configuration means includes a DNS server and a NAT server, the NAT server to route data packets to and from a virtual IP address of the network.

Li, explicitly discloses the system comprising a Domain Name system and a network address translator (NAT) for routing the data packets from virtual IP address to the Internet or external network (fig. 6 item #236, 238, 210, col. 2 L60-67, col. 8 L15-34).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Abboud and Steitle in view of Li, in order to include a Domain Name server and NAT server.

One of ordinary skilled in the art would have been motivated in order to enable the local area network (LAN) to communicate with the Internet successfully (Li, col. 2 L60-67, col. 8 L24-26).

As per claims 22, 34 and 35, they do not teach or further define over the limitations in claims 30 and 32. Therefore claims 22, 34 and 35 are rejected for the same reasons as set forth in claims 30 and 32.

Additional References

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Abboud et al., U. S. Patent No. 6,636,958 B2.
- b. Ludovici et al., U. S. Patent No. 6,567,849 B2.
- c. Wilde et al., U. S. Patent No. 6,066,182.
- d. Knox et al., U. S. Patent No. 5,978,911.
- e. Selitrennikoff et al., U. S. Patent No. 6,301,612 B1.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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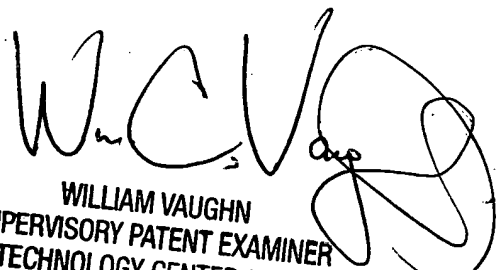
Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on Increased Flex Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kamal Divecha
Art Unit 2151
November 20, 2006.



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